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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,415	01/04/2002	James G. Whayne	270/271	1554
23639	7590	02/02/2004	EXAMINER	
BINGHAM, MCCUTCHEN LLP THREE EMBARCADERO, SUITE 1800 SAN FRANCISCO, CA 94111-4067			SHAW, SHAWNA JEANNINE	
			ART UNIT	PAPER NUMBER
			3737	
DATE MAILED: 02/02/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

S7

<b>Office Action Summary</b>	Application N .	Applicant(s)
	10/039,415	WHAYNE ET AL.
	Examin r Shawna J. Shaw	Art Unit 3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 08 December 2003.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 66-87 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 73 and 84 is/are allowed.
- 6) Claim(s) 66-72, 74-83 and 85-87 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 20 March 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)      4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)      5) Notice of Informal Patent Application (PTO-152)  
 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.      6) Other:

## DETAILED ACTION

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 66-72, 74-83 and 85-87 have been considered but are moot in view of the new ground(s) of rejection.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the binary map designator(s) (364) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Since the binary map designators are not described in the drawings, the examiner best understands this feature to be shaped and colored symbols (e.g., stars) for identifying functions of, or conditions sensed by, electrode(s) on the display screen (see pp. 42-45 of the specification of the present invention).

3. Claims 66-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willis et al. '474 of record in view of Willis et al. '568.

Regarding claims 66, 67, 72, 74-78, 83 and 85-87, Willis et al. teach an electrode structure in contact with heart tissue for mapping and ablation/pacing and further displaying a map of the structure while performing at least part of the procedure and annotating and manipulating the map (col. 18 lines 47-61, col. 20 lines 28-53). See also figures 1, 31 and 32. Although Willis et al. '474 uses stars to identify and mark recording electrodes (see fig. 32 and col. 22 lines 30-32), Willis et al. differs from the claimed invention in that "binary map designators" (i.e., shaped and colored symbols) for displaying information about the electrodes are not explicitly addressed. Willis et al. '568 provides the general teaching of using color in addition to shapes to identify and mark electrodes (52, 54, 56, 58). See fig. 12A, B and col. 7 lines 36-63. It would have been obvious at the time the invention was made to a person of ordinary skill in the art to modify the electrode representations of Willis et al. '474 to include another dimension

such as color as taught by Willis et al. '568 to more quickly convey important information about the individual electrodes in a condensed format that is easier for the user to process.

Further regarding claims 68-71 and 79-82, Willis et al. differs from the claimed invention in that annotation of early depolarization, fractionation, high pace index or arrhythmia entrainment (all related to arrhythmia) is not addressed explicitly. Willis et al. does disclose that in addition to activation time and potential, other mapping data related to arrhythmogenic sites may also be shown on the display (col. 20 lines 46-55). At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to annotate the electrodes with user-defined events such as potential or probability of an arrhythmogenic site because Applicant has not disclosed that annotating the electrodes with a particular type of mapping data provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with annotating potentials or probabilities of an arrhythmogenic site since these also perform the function of indicating regions of abnormal cardiac tissue.

***Allowable Subject Matter***

4. Claims 73 and 84 are allowed.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

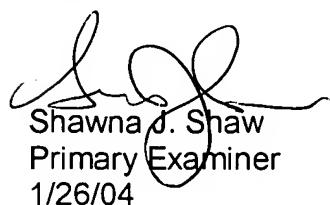
§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawna J. Shaw whose telephone number is (703) 308-2985. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Ruhl can be reached on (703) 308-2262. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3590.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.



Shawna J. Shaw  
Primary Examiner  
1/26/04